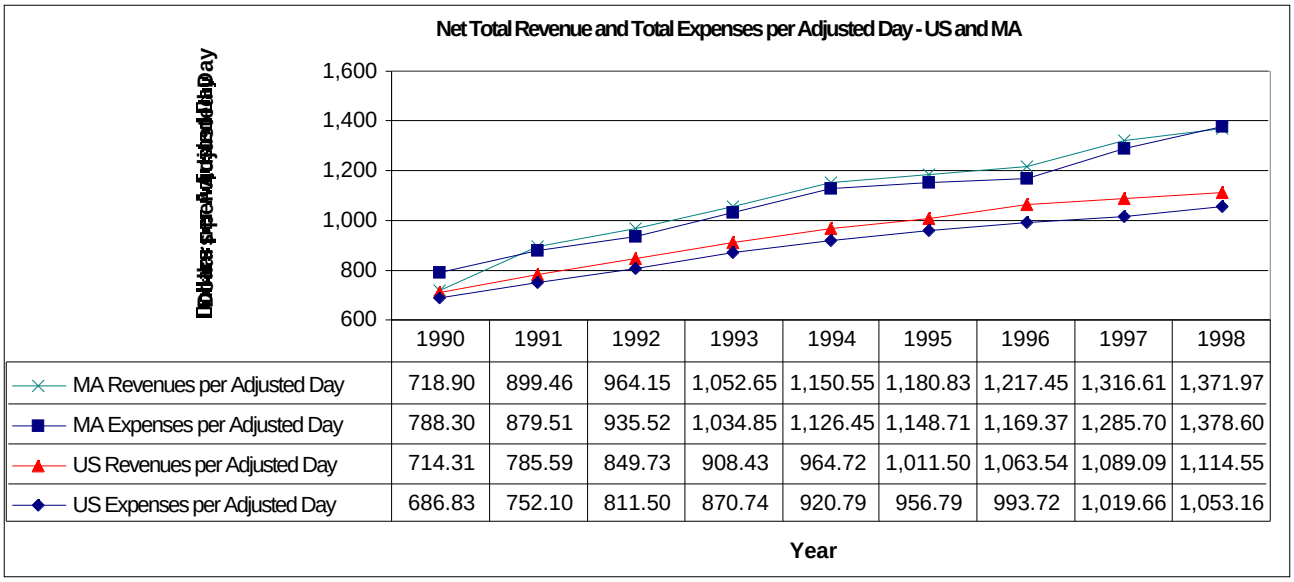
Figure 1:
1998 hospital profit margins: All over the map

State	Total Profit Margin (%)	State	Total Profit Margin (%)
Alabama	4.5	Montana	9.7
Alaska	11.9	Nebraska	10.9
Arizona	7.2	Nevada	7.1
Arkansas	6.9	New Hampshire	6.9
California	4.2	New Jersey	0.7
Connecticut	8.8	New Mexico	9.7
Delaware	4.0	New York	1.1
District of Columbia	2.4	North Carolina	10.5
Florida	7.9	North Dakota	6.7
Georgia	10.9	Ohio	4.7
Hawaii	2.3	Oklahoma	4.4
Idaho	11.9	Oregon	6.7
Illinois	7.0	Pennsylvania	3.4
Indiana	8.6	Rhode Island	5.0
Iowa	7.1	South Carolina	8.0
Kansas	8.9	South Dakota	6.0
Kentucky	6.6	Tennessee	9.5
Louisiana	5.9	Texas	8.4
Maine	8.4	Utah	7.4
Maryland	4.6	Vermont	2.6
Massachusetts	**(.02)**	Virginia	9.4
Michigan	6.0	Washington	4.4
Minnesota	6.7	West Virginia	5.9
Mississippi	6.0	Wisconsin	6.8
Missouri	6.3	Wyoming	10.7

Sources: Modern Healthcare, April 10, 2000; AHA Hospital Statistics 2000

- Profit Margins in Massachusetts are the lowest in the country.
- Note: This data includes acute and non-acute care hospitals.

Figure 2:

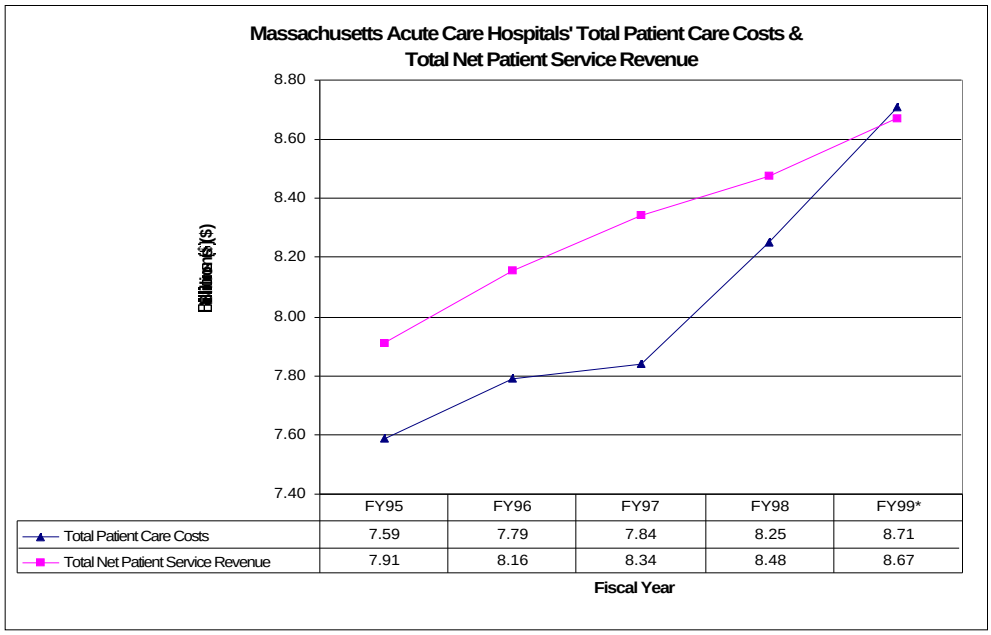


	1990	1991	1992	1993	1994	1995	1996	1997	1998
MA Revenues per Adjusted Day	718.90	899.46	964.15	1,052.65	1,150.55	1,180.83	1,217.45	1,316.61	1,371.97
MA Expenses per Adjusted Day	788.30	879.51	935.52	1,034.85	1,126.45	1,148.71	1,169.37	1,285.70	1,378.60
US Revenues per Adjusted Day	714.31	785.59	849.73	908.43	964.72	1,011.50	1,063.54	1,089.09	1,114.55
US Expenses per Adjusted Day	686.83	752.10	811.50	870.74	920.79	956.79	993.72	1,019.66	1,053.16

Source: American Hospital Association, *Hospital Statistics, 1991/92 – 2000.*

- Massachusetts hospital revenues and expenses have been increasing slightly faster than the national average. Unlike the national trend, Massachusetts hospital expenses appear to be increasing more sharply than revenues.
- Hospital = all non-federal, short-term general and other special hospitals, whose facilities and services are available to the public.
- Expenses = Patient Service expenses plus all other expenses for the reporting period.
- Revenue = Net patient service revenue, including contributions, endowment revenue, government grants, and all other payments not made on behalf of individual patients.
- Adjusted Day = [outpatient visits*(outpatient revenue per outpatient visit/inpatient revenue per inpatient day)]+inpatient days.
- 1996 calculations for MA expenses per Adjusted Day and MA Revenues per Adjusted Day include a projected value for adjusted patient days.

Figure 3:

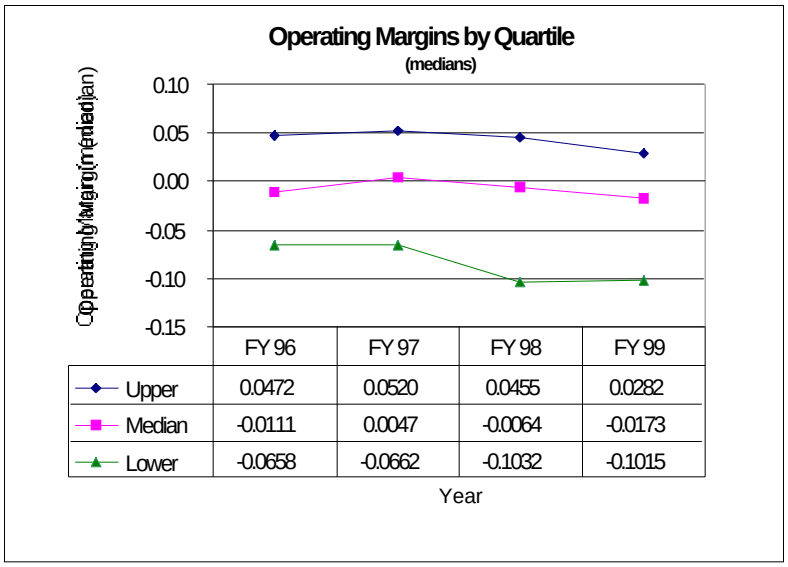


	FY95	FY96	FY97	FY98	FY99*
Total Patient Care Costs	7.59	7.79	7.84	8.25	8.71
Total Net Patient Service Revenue	7.91	8.16	8.34	8.48	8.67

Source: DHCFP403 Cost Reports

- Total patient care costs in Massachusetts are increasingly more rapidly than patient service revenue. Total industry costs exceeded total industry revenues in FY 99.

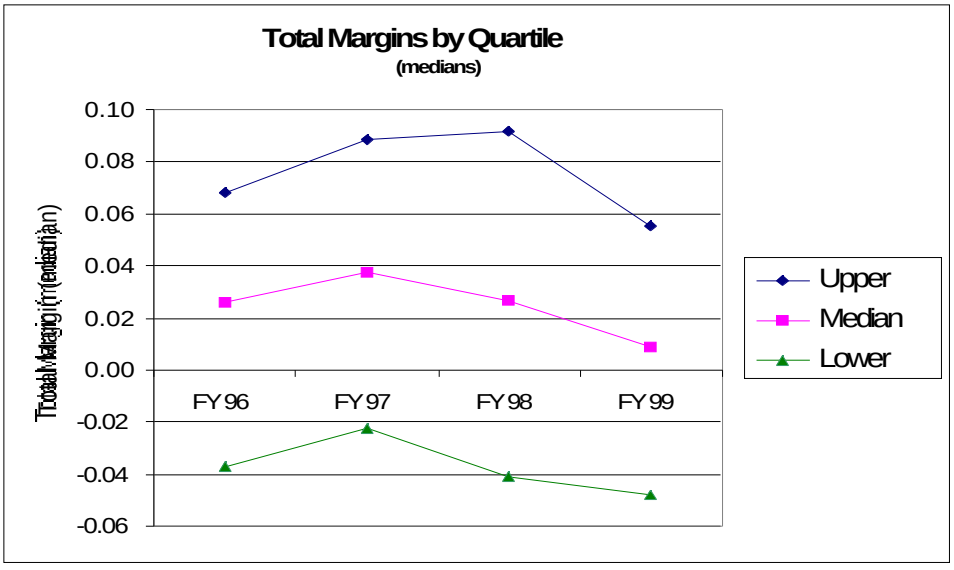
Figure 4:



Source: DHCFP403 Cost Reports

- This graph shows the trend in operating margins for the best off, middle, and worst off hospitals. Margins for all the groups declined in FY 98, and margins for the top two groups of hospitals declined again in FY 99, while the worst off group remained stable in FY 99.
- The top line represents the median operating margin of the top 25% of Massachusetts acute care hospitals. The middle line is median of all hospitals. The bottom line is the median of the 25% of hospitals with the worst margins. Operating margin is operating revenue less operating costs over total revenues.

Figure 5:



Source: DHCFP403 Cost Reports

- This graph shows the trend in total margins for the best off, middle, and worst off hospitals. Margins for all the groups declined in FY 98 and FY99.
- The top line represents the median total margin of the top 25% of Massachusetts acute care hospitals. The middle line is median of all hospitals. The bottom line is the median of the 25% of hospitals with the worst margins. Total margin is operating and non-operating revenue less operating and non-operating costs over total revenues.

Figure 6:

Liquidity Ratios

	Current Ratio		Days Cash on Hand		Days to A/R	
	FY97	FY98	FY97	FY98	FY97	FY98
Teaching Hospitals	1.60	1.46	13.91	3.84	59.13	76.35
%Change		-8.78%		-72.39%		29.12%
Community Hospitals	1.58	1.52	18.33	16.01	60.05	60.40
%Change		-3.55%		-12.67%		0.58%

Source: DHCFP403 Cost Reports

- Teaching hospitals have more serious problems with liquidity.
- While the current ratio is adequate for both, teaching hospitals have only an average of 3 days of cash for expenses on hand versus community hospitals, which have an average of 16 days of cash on hand.
- Teaching hospitals take longer to collect accounts receivable than community hospitals, and this number is growing significantly faster from year to year.

Figure 7:

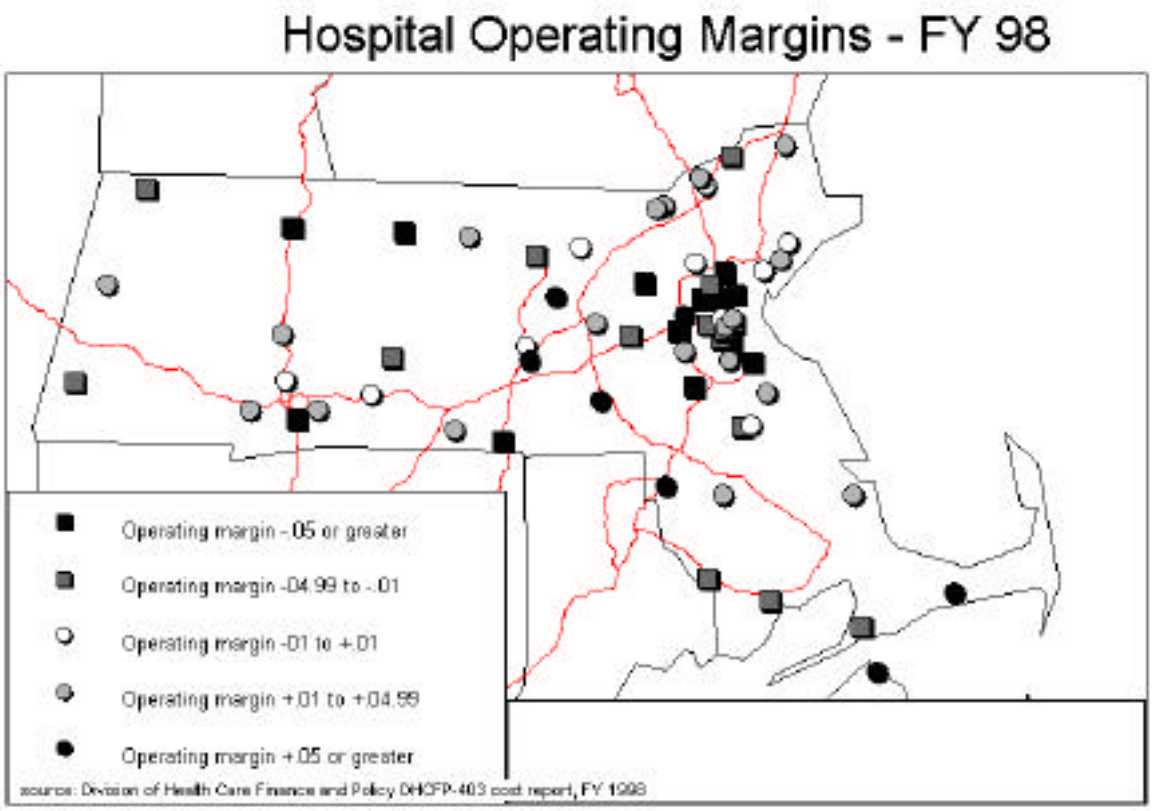
Debt Structure Ratios

	Equity Financing		Total Debt to Assets		Debt Service Coverage	
	FY97	FY98	FY97	FY98	FY97	FY98
Teaching Hospitals	0.392	0.361	0.608	0.639	4.09	3.09
%Change		-7.97%		5.14%		-24.42%
Community Hospitals	0.419	0.414	0.581	0.586	1.15	(0.18)
%Change		-0.99%		0.71%		-115.85%

Source: DHCFP403 Cost Reports

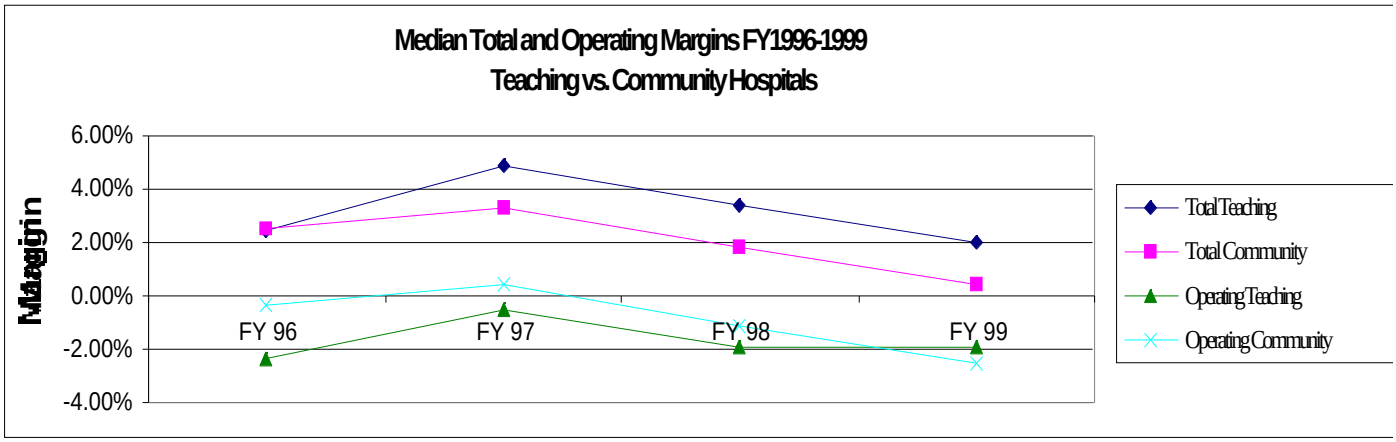
- Teaching hospitals have more debt financing than community hospitals.
- Debt financing for both has been increasing over the past year.
- Even with more debt, teaching hospitals had adequate cash to cover their obligations, while community hospitals fell short in 1998.

Figure 8:



- While operating margins for the hospital industry as a whole are negative, there is considerable variation among individual facilities.

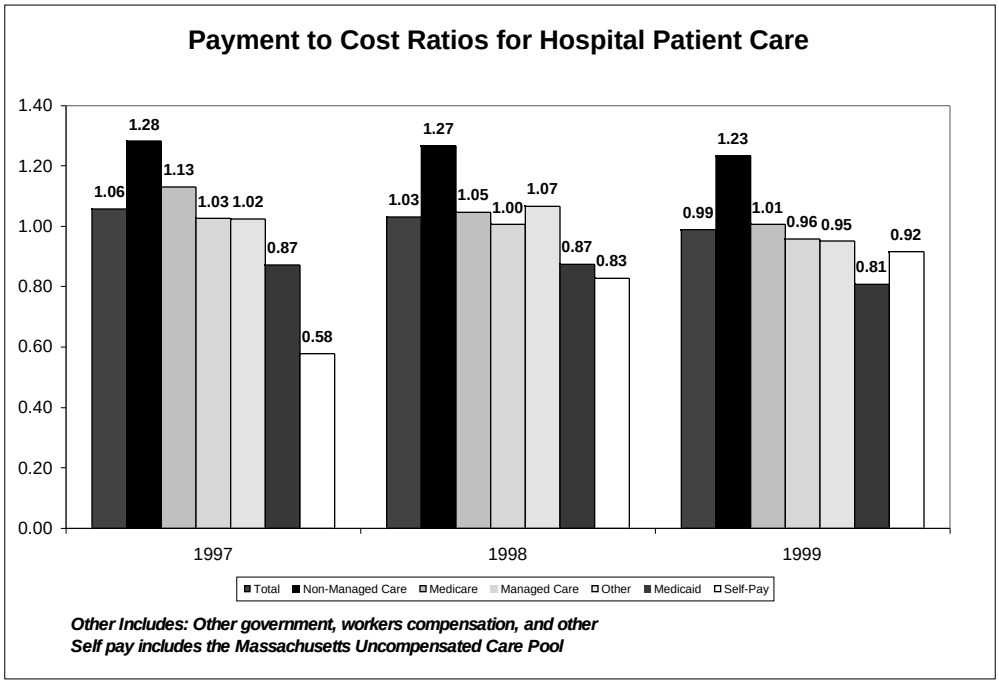
- **Figure 9:**



Source: DHCFP403 Cost Reports

- Since 1997, the median total margin and the median operating margin for both teaching and community hospitals have been steadily declining.
- Teaching hospitals' median operating margin in all four years studied; while community hospitals' operating margins were only positive in FY 97.
- The median total margin (includes operating and non-operating revenue) for community hospitals was only slightly positive in FY 99.

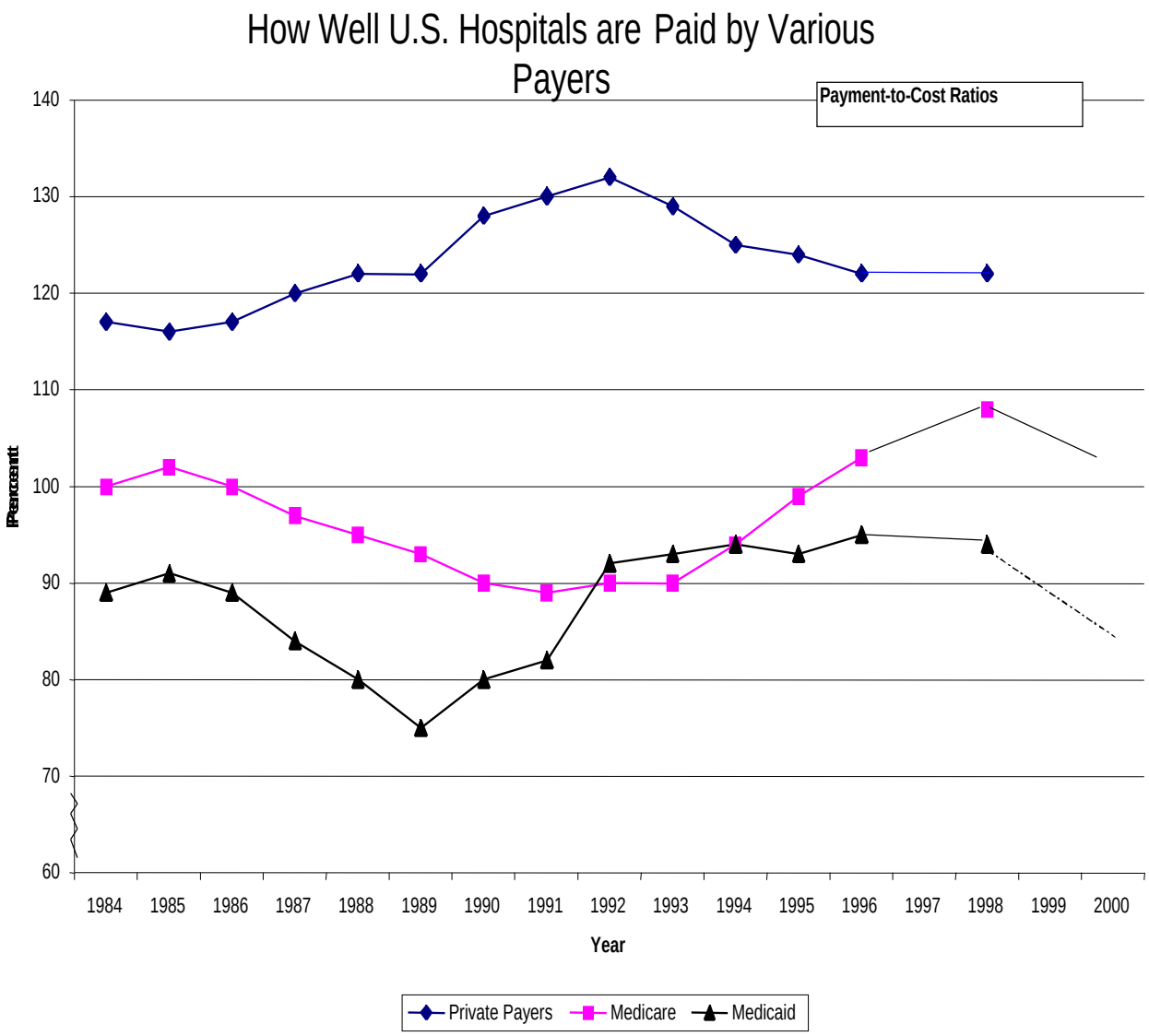
Figure 10:



Source: DHCFP403 Cost Reports
NOTE: 99 data is as filed. Ratios may increase after auditors have reviewed data filings.

- Since 1997, the total payment to cost ratio for Massachusetts acute care hospitals has decreased from $1.06 of revenue for every dollar of cost to $.99. Payment levels from all payers have decreased relative to increasing costs. Payments from managed care payers fell below 1.0 in FY 99. The increase in self-pay payment levels may be due to fully funding the Uncompensated Care Pool, as well as to an increase in the number of international patients.

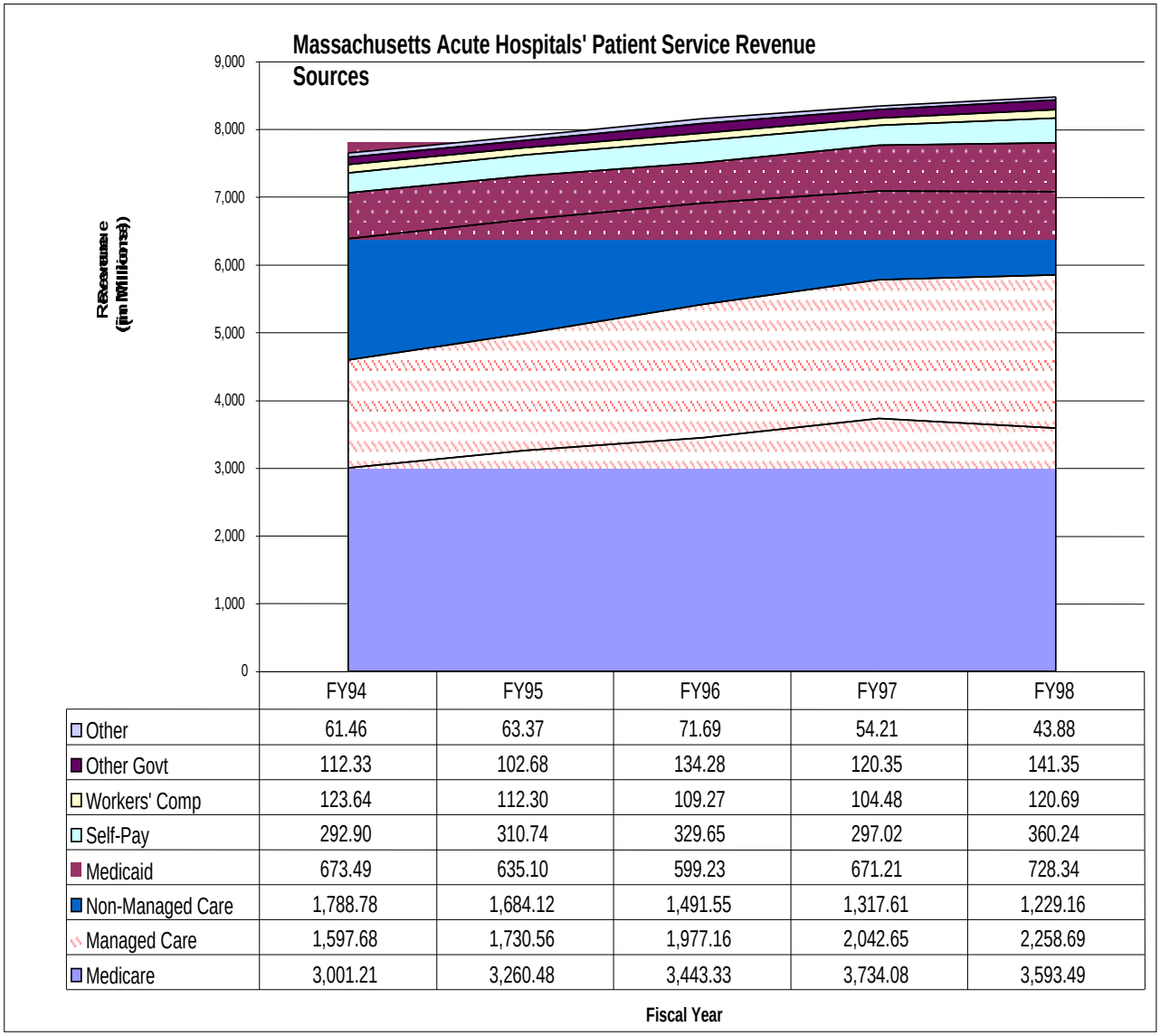
Figure 11:



Source: Stuart Altman, Medicare Payment Advisory Commission, Annual Survey of Hospitals

- Medicaid payment rates to U.S. hospitals have averaged below cost for all 15 years studied, and averaged about 93% of cost for most of the 90s.
- Medicare payment rates were below cost from 1987 through 1995, but grew quickly from 1996 through 1998.
- Private payers have consistently paid well above cost, and considerably higher rates than public payers for all 15 years studied.

Figure 12:

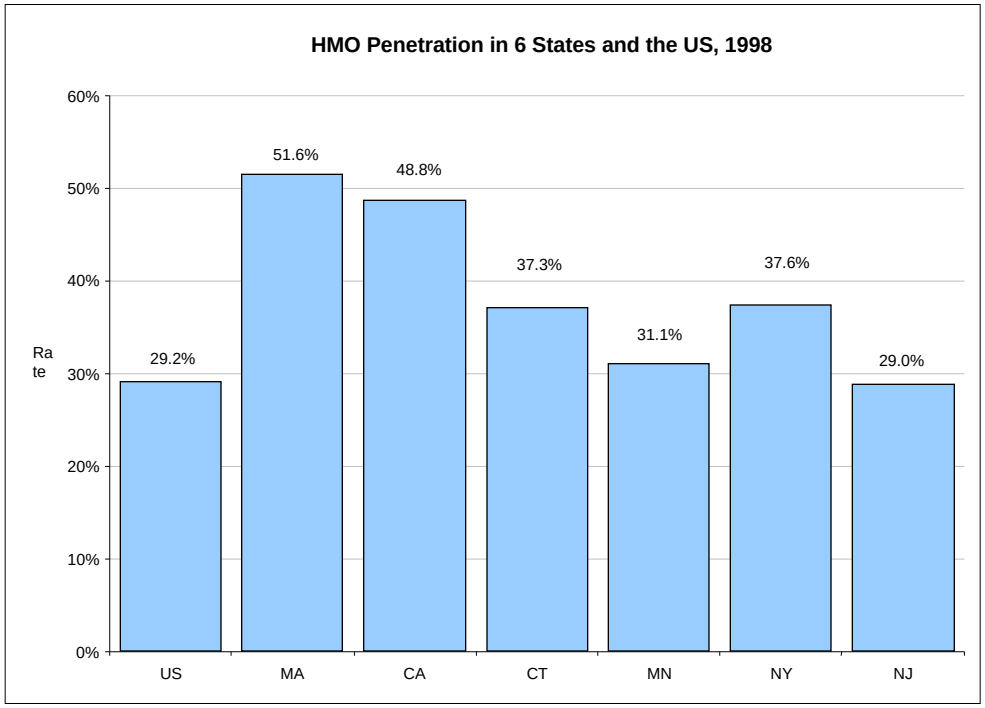


	FY94	FY95	FY96	FY97	FY98
Other	61.46	63.37	71.69	54.21	43.88
Other Govt	112.33	102.68	134.28	120.35	141.35
Workers' Comp	123.64	112.30	109.27	104.48	120.69
Self-Pay	292.90	310.74	329.65	297.02	360.24
Medicaid	673.49	635.10	599.23	671.21	728.34
Non-Managed Care	1,788.78	1,684.12	1,491.55	1,317.61	1,229.16
Managed Care	1,597.68	1,730.56	1,977.16	2,042.65	2,258.69
Medicare	3,001.21	3,260.48	3,443.33	3,734.08	3,593.49

Source: DHCFP 403 Cost Reports

- Managed care revenues surpassed non-managed care revenues in FY 95, and have continued to increase.
- The early effects of the MassHealth expansion can be seen in FY 97 and FY 98.
- Total Patient Service Revenue: FY94 = $7.65B, FY95= $7.90B, FY96 = $8.16B, FY97 = $8.34B, FY98 = $8.48B

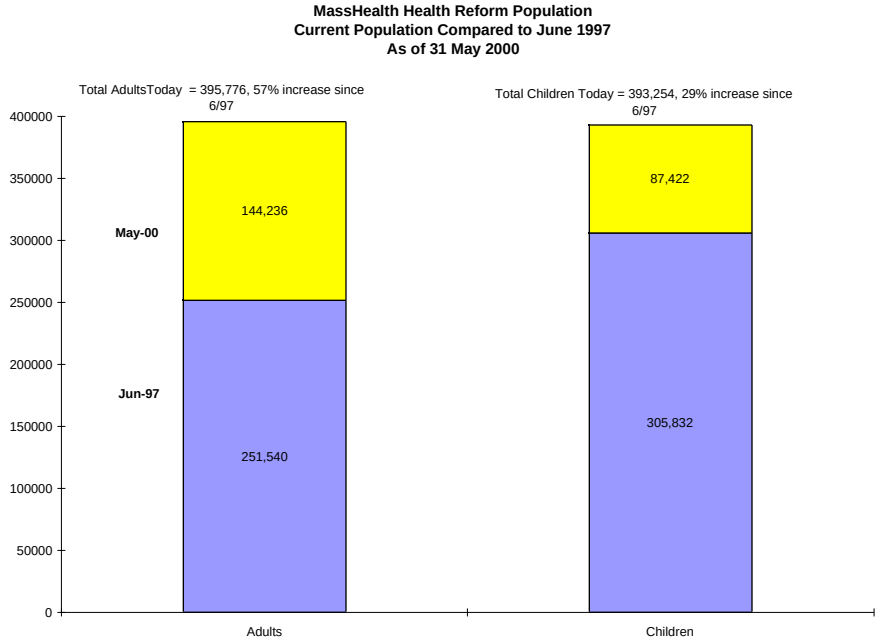
Figure 13:



Source: Reforming the Health Care System: State Profiles 1999, AARP © 1999

- Massachusetts has the highest HMO penetration rate in the country.
- Also included in the graph are other states with high rates of managed care.

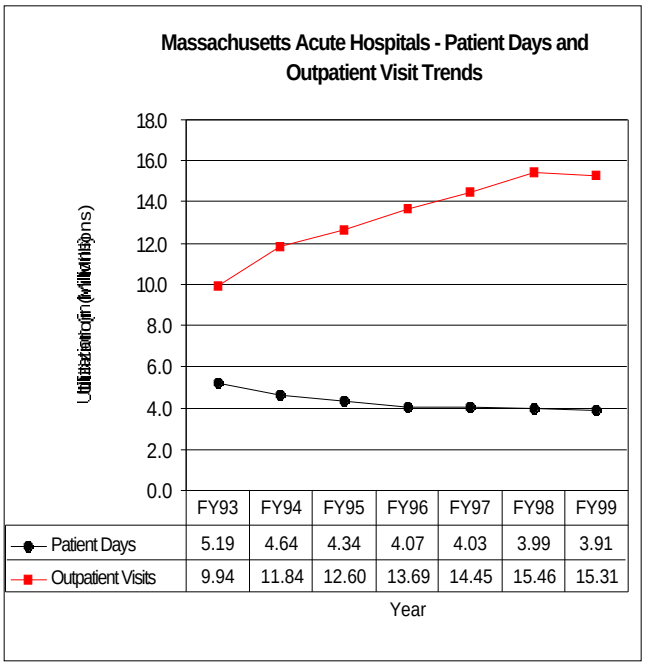
Figure 14:

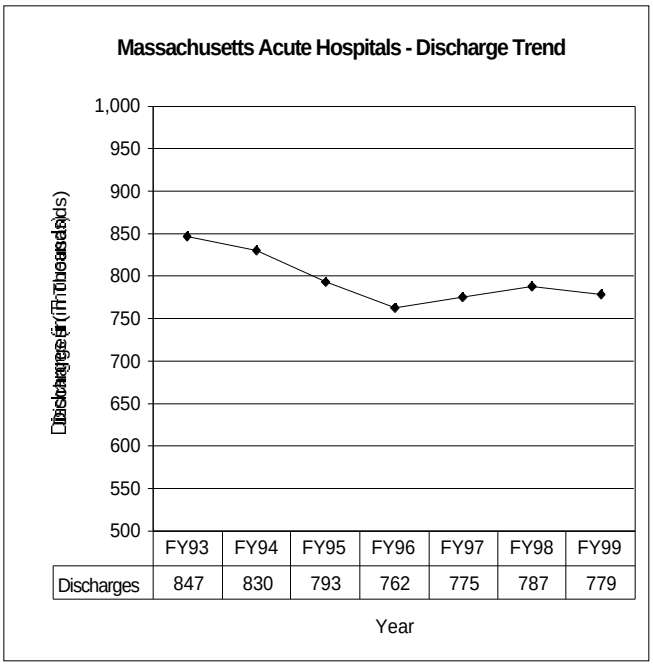


Source: Massachusetts Division of Medical Assistance

- The total number of people enrolled in MassHealth has increased dramatically since 1997; the increase in adult enrollment is nearly twice the increase in child enrollment.

Figure 15:

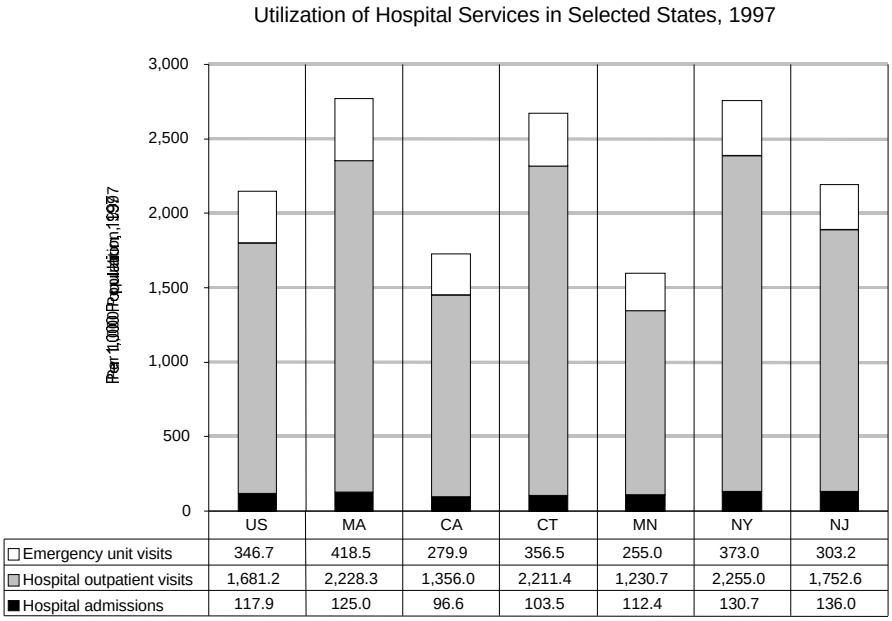




Source: DHCFP 403 Cost Reports

- Outpatient visits have increased rapidly, while inpatient days decreased slightly.
- Inpatient discharges decreased from FY 93 to FY 96, but remained steady from FY 96 through FY 99.

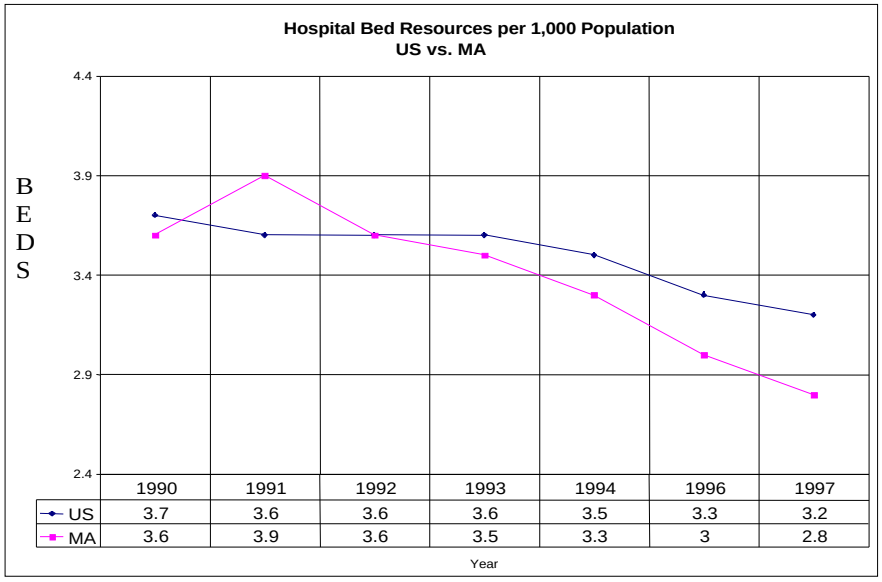
Figure 16:



Source: Reforming the Health Care System: State Profiles 1999, AARP ©1999

- Massachusetts utilization of inpatient hospital services is similar to the national average, and while outpatient clinic visits and emergency unit visits far exceeded the national average for those services.

Figure 17:

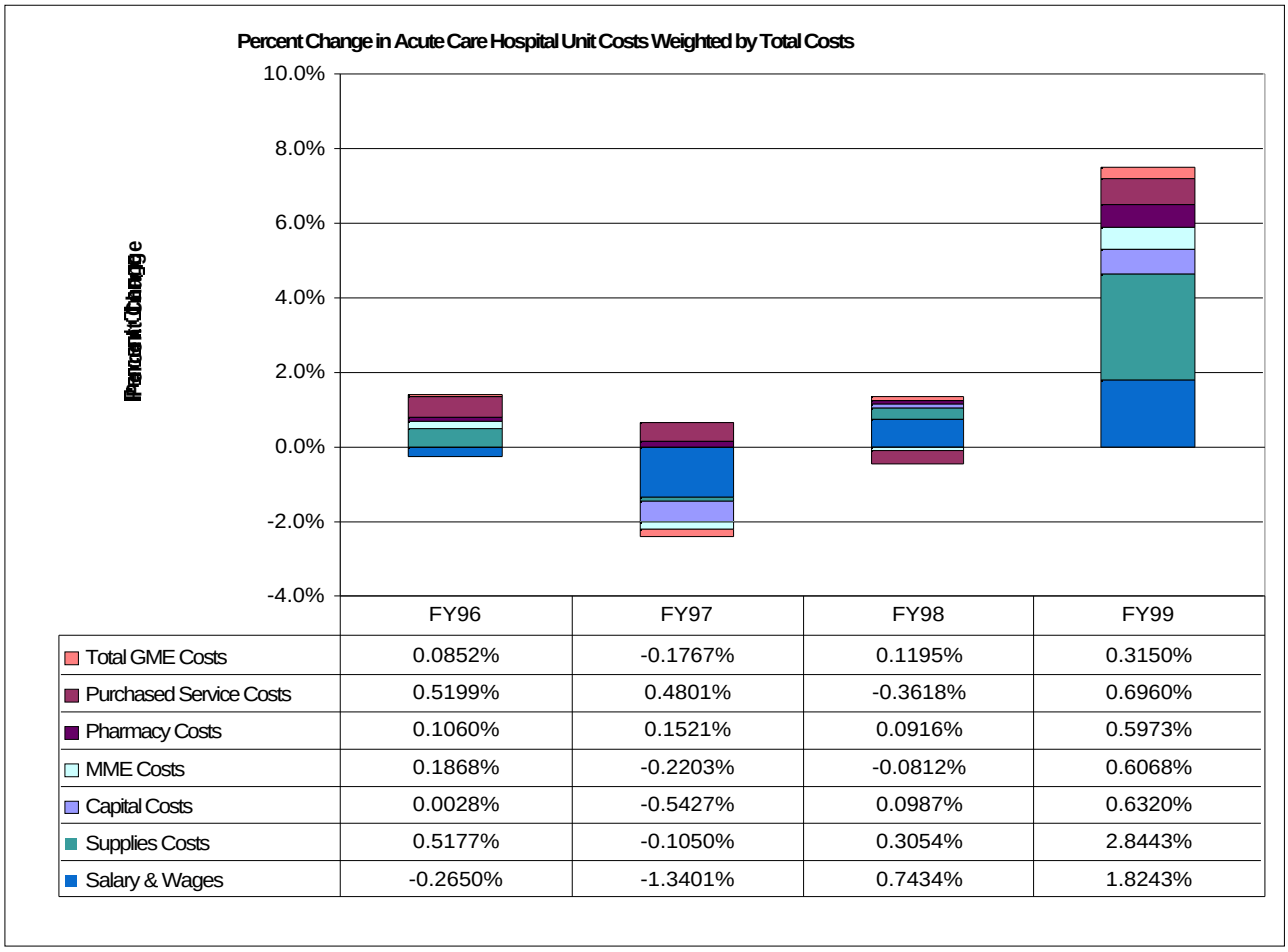


Note: Massachusetts data in this graph includes data from non-acute and state hospitals. Specifically, the definition of Hospital = all non-federal short-term general and other special hospitals, whose facilities and services are available to the public.

Source: US Department of Health and Human Resources

- Capacity in Massachusetts Hospitals fell below the national average in 1993, and has been decreasing more rapidly than in the US as a whole.

Figure 18:

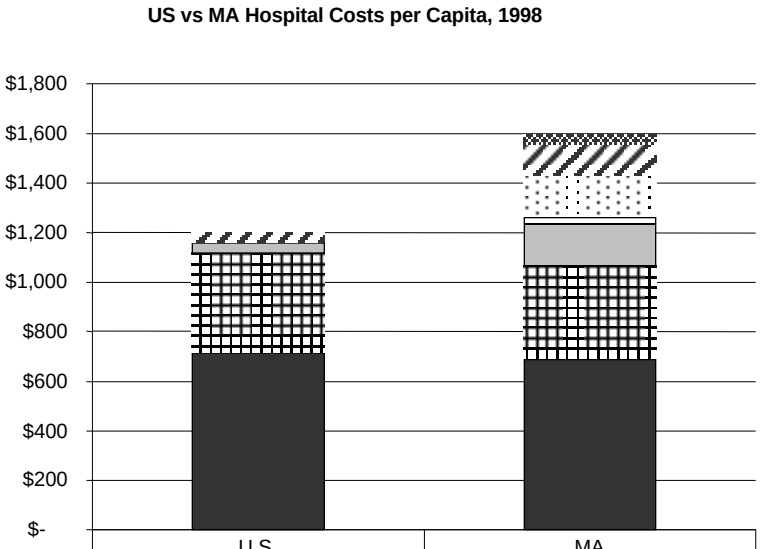


	FY96	FY97	FY98	FY99
Total GME Costs	0.0852%	-0.1767%	0.1195%	0.3150%
Purchased Service Costs	0.5199%	0.4801%	-0.3618%	0.6960%
Pharmacy Costs	0.1060%	0.1521%	0.0916%	0.5973%
MME Costs	0.1868%	-0.2203%	-0.0812%	0.6068%
Capital Costs	0.0028%	-0.5427%	0.0987%	0.6320%
Supplies Costs	0.5177%	-0.1050%	0.3054%	2.8443%
Salary & Wages	-0.2650%	-1.3401%	0.7434%	1.8243%

Source: DHCFP 403 Cost Reports

- This graph shows the increases and decreases of the components of hospital costs from the previous fiscal year.
- In prior years, changes in hospital cost components fluctuated between increases and decreases. However, between FY98 and FY99, every cost component increased. Supplies and Salary and Wages costs represent the most dramatic increases.
- Percent change = component's percent change per inpatient day equivalent * component's percent of total costs
- Inpatient day equivalent = inpatient days + (outpatient visits/2).
- Total percent changes in costs: FY 96 = 1.15%, FY97 = -1.75%, FY98 = 0.91%, FY99 = 7.51%.

Figure 19:

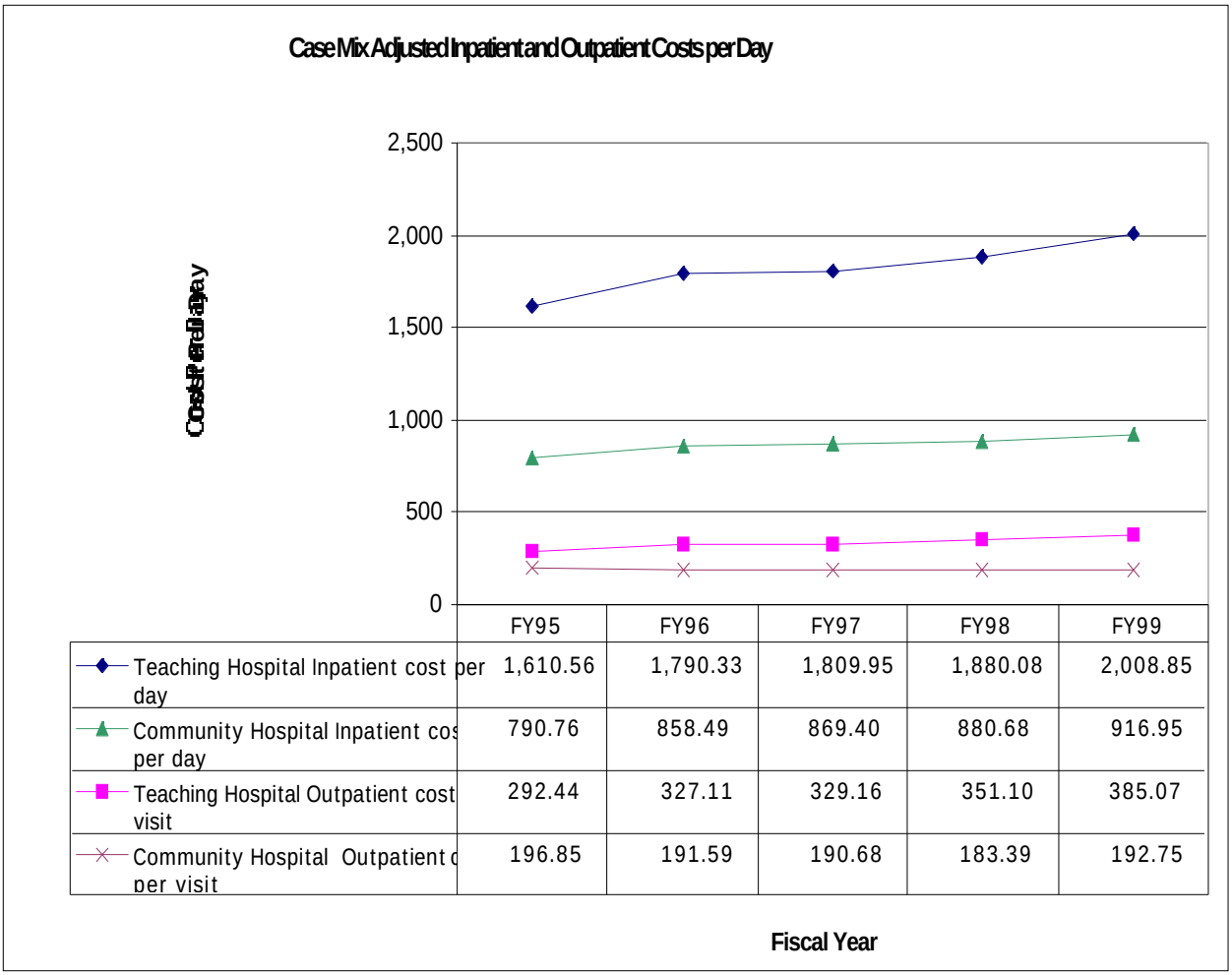


	U.S.	MA
Net migration		$44
Research & GME	$42	$124
Higher MA outpatient utilization		$165
Higher MA inpatient utilization		$28
Utilization of Teaching Hospitals	$42	$168
Outpatient cost after adjustment	$401	$376
inpatient cost after adjustment	$716	$691

Sources: American Hospital Association, *Hospital Statistics, 1998;* Reforming the Health Care System: State Profiles 1999, AARP © 1999; DHCFP-403 cost reports; U.S. Census data; An *Analysis of Massachusetts Hospital's Efficiency and Costs*, The Lewin Group; A *Study on the Condition of Massachusetts Community Hospitals and Prospects for the Future*, Massachusetts Council of Community Hospitals.

- Although Massachusetts has lower base inpatient and outpatient costs than the national average, its total per capita cost is higher than that of the US.
- The higher total per capita cost is largely due to higher utilization of outpatient services; more frequent use of teaching facilities, and higher research and education costs.

Figure 20:

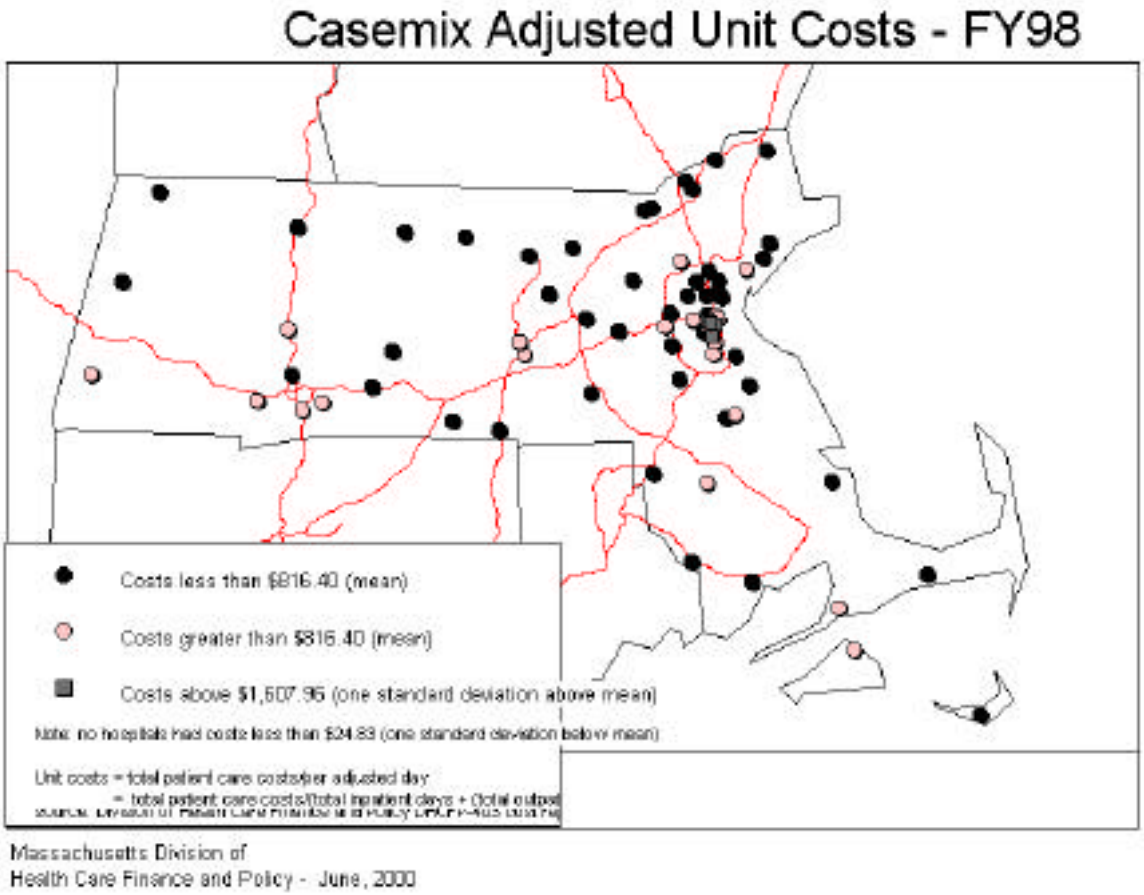


	FY95	FY96	FY97	FY98	FY99
Teaching Hospital Inpatient cost per day	1,610.56	1,790.33	1,809.95	1,880.08	2,008.85
Community Hospital Inpatient cos per day	790.76	858.49	869.40	880.68	916.95
Teaching Hospital Outpatient cost visit	292.44	327.11	329.16	351.10	385.07
Community Hospital Outpatient c per visit	196.85	191.59	190.68	183.39	192.75

Source: DHCFP 403 Cost Reports

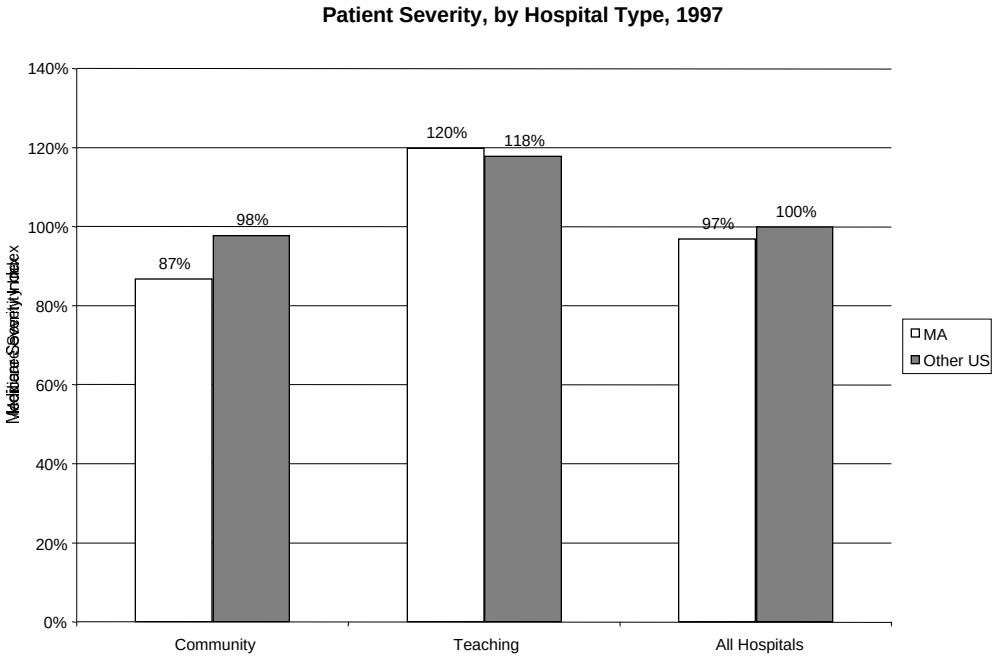
- The difference between inpatient costs at Teaching vs. Community Hospitals is much greater than the difference between their respective outpatient costs.

Figure 21:



- Unit costs vary considerably across hospitals.

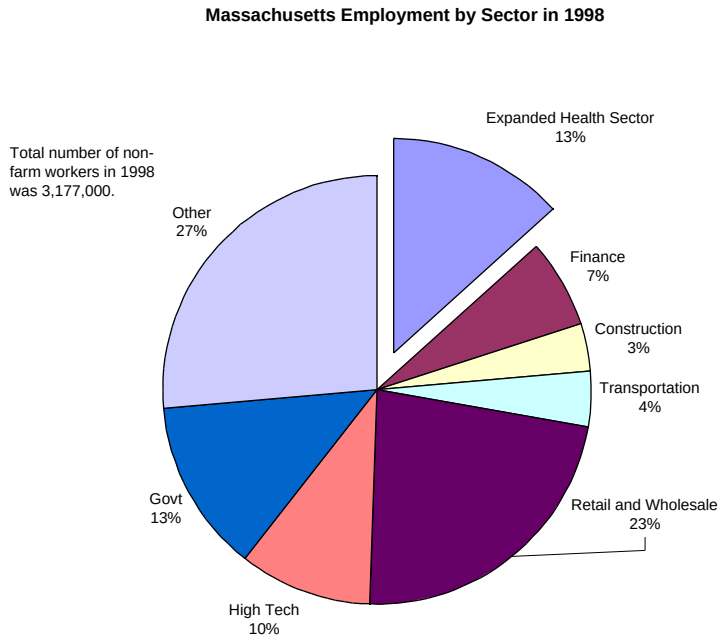
Figure 22:



Source: *Study on the Condition of Massachusetts Community Hospitals and Prospects for the Future*, Massachusetts Council of Community Hospitals

- The case mix at Massachusetts teaching hospitals is only slightly higher than the national average, despite the complex care provided to out of state patients. Massachusetts community hospitals have much lower case mix than community hospitals in the rest of the country.

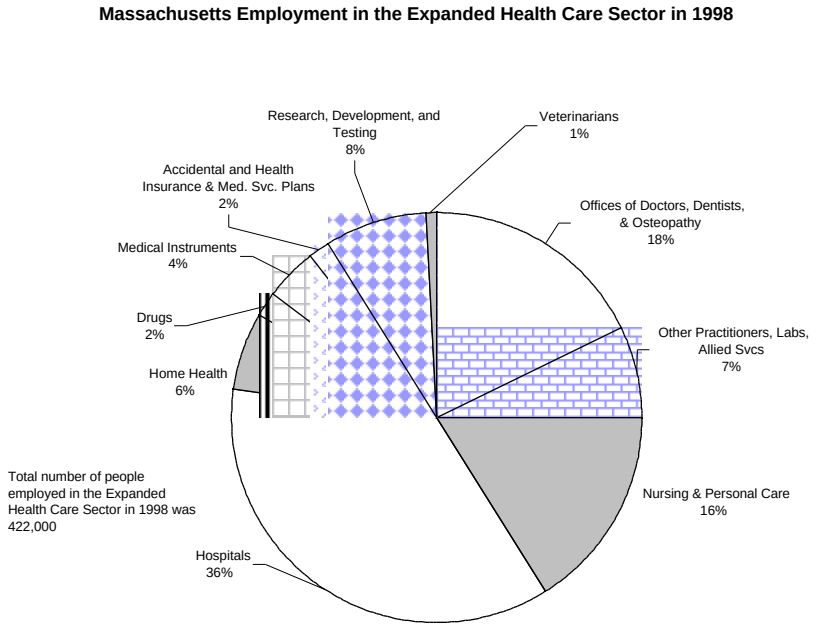
Figure 23:



Source: Bureau of Labor Statistics, cited in *The Massachusetts Health Care Industry*, Standard & Poor, 2000

The expanded health care sector accounts for 13% of the state's employment.

Figure 24:



Source: Bureau of Labor Statistics, cited in *The Massachusetts Health Care Industry*, Standard & Poor, 2000

- Hospitals employ more than a third of the health care workers in Massachusetts.